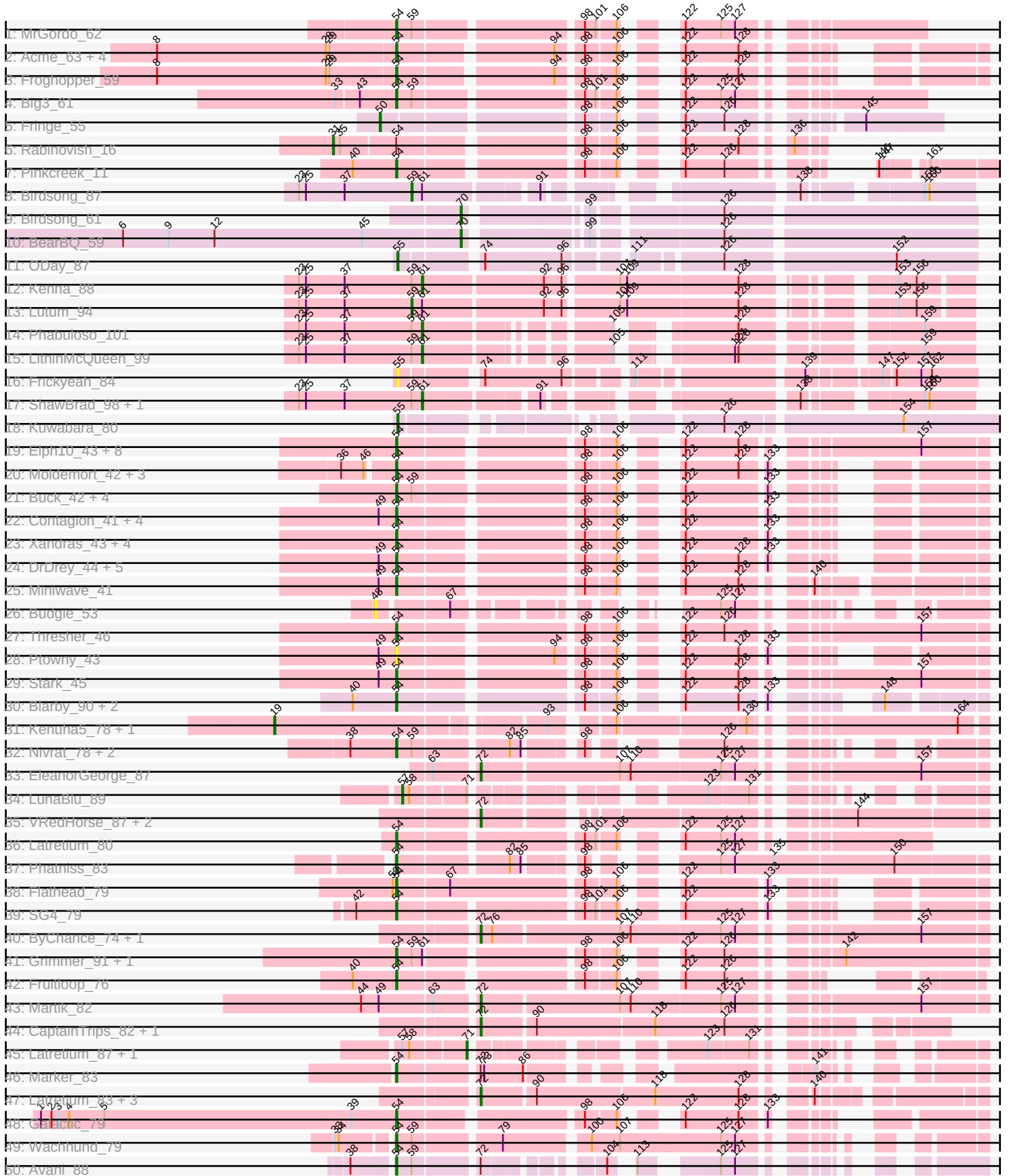
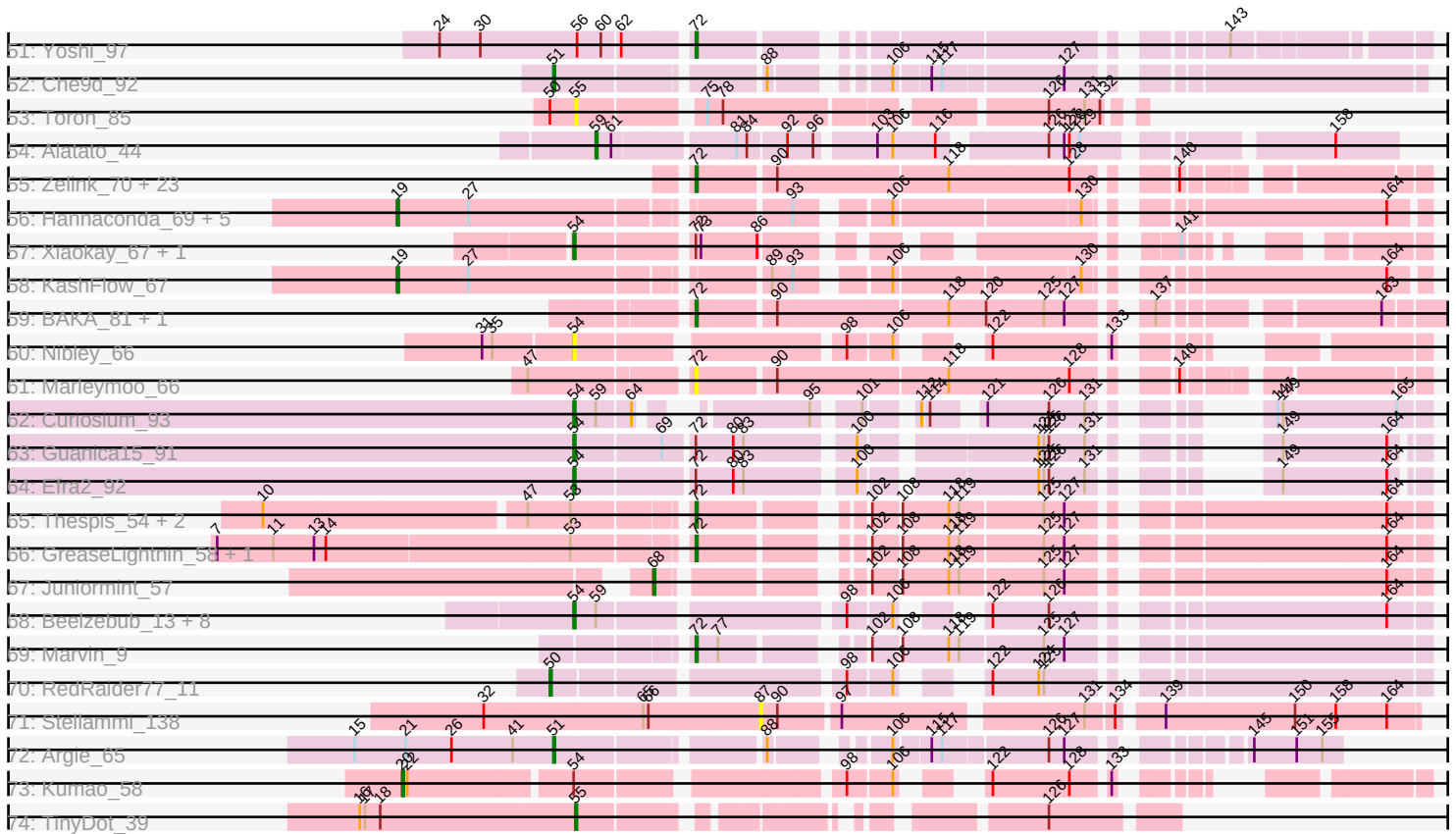


Pham 280146



Pham 280146



Note: Tracks are now grouped by subcluster and scaled. Switching in subcluster is indicated by changes in track color. Track scale is now set by default to display the region 30 bp upstream of start 1 to 30 bp downstream of the last possible start. If this default region is judged to be packed too tightly with annotated starts, the track will be further scaled to only show that region of the ORF with annotated starts. This action will be indicated by adding "Zoomed" to the title. For starts, yellow indicates the location of called starts comprised solely of Glimmer/GeneMark auto-annotations, green indicates the location of called starts with at least 1 manual gene annotation.

Pham 280146 Report

This analysis was run 02/07/26 on database version 634.

Pham number 280146 has 162 members, 19 are drafts.

Phages represented in each track:

- Track 1 : MrGordo_62
- Track 2 : Acme_63, Lesedi_57, Fajezeel_62, Bxb1_55, Greg_62
- Track 3 : Froghopper_59
- Track 4 : Big3_61
- Track 5 : Fringe_55
- Track 6 : Rabinovish_16
- Track 7 : Pinkcreek_11
- Track 8 : Birdsong_87
- Track 9 : Birdsong_61
- Track 10 : BearBQ_59
- Track 11 : ODay_87
- Track 12 : Kenna_88
- Track 13 : Lutum_94
- Track 14 : PhabuIoso_101
- Track 15 : LitninMcQueen_99
- Track 16 : Frickyeh_84
- Track 17 : ShawBrad_98, Asapag_87
- Track 18 : Kuwabara_80
- Track 19 : Elph10_43, NoSleep_45, Murphy_45, Maxxinista_45, Lilac_46, Cjw1_44, Lilizi_43, Czyszczo1_44, RiverMonster_44
- Track 20 : Moldemort_42, MadamMonkfish_42, Bogg_42, AmericanBeauty_43
- Track 21 : Buck_42, TeamEdward_43, StormChicken_43, Rimmer_42, Youngblood_43
- Track 22 : Contagion_41, Cookies_41, Mosby_40, TeardropMSU_40, Tomaszewski_40
- Track 23 : Xandras_43, JeTaime_44, OrionPax_43, Filch_44, Pumpkin_45
- Track 24 : DrDrey_44, Phrux_42, HanKaySha_43, 244_45, Hopey_44, ShereKhan_42
- Track 25 : Miniwave_41
- Track 26 : Budgie_53
- Track 27 : Thresher_46
- Track 28 : Ptowny_43
- Track 29 : Stark_45
- Track 30 : Blarby_90, Zapner_89, Jabbawokkie_90
- Track 31 : Kenuha5_78, Nekros_71
- Track 32 : Nivrat_78, Che8_85, LilMoolah_80
- Track 33 : EleanorGeorge_87

- Track 34 : LunaBlu_89
- Track 35 : VRedHorse_87, Estave1_94, Avani_91
- Track 36 : Latretium_80
- Track 37 : Phatniss_83
- Track 38 : Flathead_79
- Track 39 : SG4_79
- Track 40 : ByChance_74, ShowerHandel_83
- Track 41 : Grimmer_91, Mahavrat_77
- Track 42 : Fruitloop_76
- Track 43 : Martik_82
- Track 44 : CaptainTrips_82, MinionDave_78
- Track 45 : Latretium_87, Dante_84
- Track 46 : Marker_83
- Track 47 : Latretium_83, Wanda_76, Minerva_78, Klein_72
- Track 48 : Galactic_79
- Track 49 : Wachhund_79
- Track 50 : Avani_88
- Track 51 : Yoshi_97
- Track 52 : Che9d_92
- Track 53 : Toron_85
- Track 54 : Alatato_44
- Track 55 : Zelink_70, Superphikiman_70, Schatzie_67, Kalah2_67, Ejimix_72, Beem_72, JuicyJay_71, NihilNomen_73, Halley_74, Phoebus_75, DmpstrDiver_72, Dallas_71, Odette_71, HokkenD_65, FairyPath_41, Porcelain_72, ThreeRngTarjay_70, Redno2_69, Quallification_42, MiaZeal_73, Lucky2013_70, Squint_73, Hughesyang_71, Ariel_72
- Track 56 : Hannaconda_69, BronnyJames_66, Aubs_83, Shaboozey_65, SuperGrey_83, Donkeykong_89
- Track 57 : Xiaokay_67, Constella_63
- Track 58 : KashFlow_67
- Track 59 : BAKA_81, Duke13_79
- Track 60 : Nibley_66
- Track 61 : Marleymoo_66
- Track 62 : Curiosium_93
- Track 63 : Guanica15_91
- Track 64 : Efra2_92
- Track 65 : Thespis_54, Brusacoram_54, Atcoo_54
- Track 66 : GreaseLightnin_58, StevieRay_57
- Track 67 : Juniormint_57
- Track 68 : Beelzebub_13, Corazon_10, FeliMaine_11, Lilbit_11, LittleLaf_10, Pringar_10, Clarkson_11, JoieB_11, Huphlepuuff_11
- Track 69 : Marvin_9
- Track 70 : RedRaider77_11
- Track 71 : Stellammi_138
- Track 72 : Argie_65
- Track 73 : Kumao_58
- Track 74 : TinyDot_39

Summary of Final Annotations (See graph section above for start numbers):

The start number called the most often in the published annotations is 54, it was called in 71 of the 143 non-draft genes in the pham.

Genes that call this "Most Annotated" start:

- 244_45, Acme_63, AmericanBeauty_43, Avani_88, Beelzebub_13, Big3_61, Blarby_90, Bogg_42, Buck_42, Bxb1_55, Che8_85, Cjw1_44, Clarkson_11, Constella_63, Contagion_41, Cookies_41, Corazon_10, Curiosium_93, Czystczon1_44, DrDrey_44, Efra2_92, Elph10_43, Fajezeel_62, FeliMaine_11, Filch_44, Flathead_79, Froghopper_59, Fruitloop_76, Galactic_79, Greg_62, Grimmer_91, Guanica15_91, HanKaySha_43, Hopey_44, Huphlepuuff_11, Jabbawokkie_90, JeTaime_44, JoieB_11, Latretium_80, Lesedi_57, LilMoolah_80, Lilac_46, Lilbit_11, Lilizi_43, LittleLaf_10, MadamMonkfish_42, Mahavrat_77, Marker_83, Maxxinista_45, Miniwave_41, Moldemort_42, Mosby_40, MrGordo_62, Murphy_45, Nibley_66, Nivrat_78, NoSleep_45, OrionPax_43, Phatniss_83, Phrux_42, Pinkcreek_11, Pringar_10, Ptowny_43, Pumpkin_45, Rimmer_42, RiverMonster_44, SG4_79, ShereKhan_42, Stark_45, StormChicken_43, TeamEdward_43, TeardropMSU_40, Thresher_46, Tomaszewski_40, Wachhund_79, Xandras_43, Xiaokay_67, Youngblood_43, Zapner_89,

Genes that have the "Most Annotated" start but do not call it:

- Kumao_58, Rabinovish_16,

Genes that do not have the "Most Annotated" start:

- Alatato_44, Argie_65, Ariel_72, Asapag_87, Atcoo_54, Aubs_83, Avani_91, BAKA_81, BearBQ_59, Beem_72, Birdsong_61, Birdsong_87, BronnyJames_66, Brusacoram_54, Budgie_53, ByChance_74, CaptainTrips_82, Che9d_92, Dallas_71, Dante_84, DmpstrDiver_72, Donkeykong_89, Duke13_79, Ejimix_72, EleanorGeorge_87, Estave1_94, FairyPath_41, Frickyeah_84, Fringe_55, GreaseLightnin_58, Halley_74, Hannaconda_69, HokkenD_65, Hughesyang_71, JuicyJay_71, Juniormint_57, Kalah2_67, KashFlow_67, Kenna_88, Kenuha5_78, Klein_72, Kuwabara_80, Latretium_83, Latretium_87, LitninMcQueen_99, Lucky2013_70, LunaBlu_89, Lutum_94, Marleymoo_66, Martik_82, Marvin_9, MiaZeal_73, Minerva_78, MinionDave_78, Nekros_71, NihilNomen_73, ODay_87, Odette_71, Phabuloso_101, Phoebus_75, Porcelain_72, Qualification_42, RedRaider77_11, Redno2_69, Schatzie_67, Shaboozey_65, ShawBrad_98, ShowerHandel_83, Squint_73, Stellammi_138, StevieRay_57, SuperGrey_83, Superphikiman_70, Thespis_54, ThreeRngTarjay_70, TinyDot_39, Toron_85, VRedHorse_87, Wanda_76, Yoshi_97, Zelink_70,

Summary by start number:

Start 19:

- Found in 9 of 162 (5.6%) of genes in pham
- Manual Annotations of this start: 6 of 143
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Aubs_83 (F1), BronnyJames_66 (J), Donkeykong_89 (F1), Hannaconda_69 (J), KashFlow_67 (J), Kenuha5_78 (F1), Nekros_71 (J), Shaboozey_65 (J), SuperGrey_83 (F1),

Start 20:

- Found in 1 of 162 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 143
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Kumao_58 (singleton),

Start 31:

- Found in 2 of 162 (1.2%) of genes in pham
- Manual Annotations of this start: 1 of 143
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Rabinovish_16 (C1),

Start 48:

- Found in 1 of 162 (0.6%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Budgie_53 (E),

Start 50:

- Found in 3 of 162 (1.9%) of genes in pham
- Manual Annotations of this start: 2 of 143
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Fringe_55 (B1), RedRaider77_11 (S),

Start 51:

- Found in 2 of 162 (1.2%) of genes in pham
- Manual Annotations of this start: 2 of 143
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Argie_65 (W), Che9d_92 (F2),

Start 54:

- Found in 81 of 162 (50.0%) of genes in pham
- Manual Annotations of this start: 71 of 143
- Called 97.5% of time when present
- Phage (with cluster) where this start called: 244_45 (E), Acme_63 (A1), AmericanBeauty_43 (E), Avani_88 (F2), Beelzebub_13 (S), Big3_61 (A1), Blarby_90 (F), Bogg_42 (E), Buck_42 (E), Bxb1_55 (A1), Che8_85 (F1), Cjw1_44 (E), Clarkson_11 (S), Constella_63 (J), Contagion_41 (E), Cookies_41 (E), Corazon_10 (S), Curiosium_93 (K1), Czystczon1_44 (E), DrDrey_44 (E), Efra2_92 (K1), Elph10_43 (E), Fajezeel_62 (A1), FelMaine_11 (S), Filch_44 (E), Flathead_79 (F1), Froghopper_59 (A1), Fruitloop_76 (F1), Galactic_79 (F1), Greg_62 (A1), Grimmer_91 (F1), Guanica15_91 (K1), HanKaySha_43 (E), Hopey_44 (E), Huphlepuuff_11 (S), Jabbawokkie_90 (F2), JeTaime_44 (E), JoieB_11 (S), Latretium_80 (F1), Lesedi_57 (A1), LilMoolah_80 (F1), Lilac_46 (E), Lilbit_11 (S), Lilizi_43 (E), LittleLaf_10 (S), MadamMonkfish_42 (E), Mahavrat_77 (F1), Marker_83 (F1), Maxxinista_45 (E), Miniwave_41 (E), Moldemort_42 (E), Mosby_40 (E), MrGordo_62 (A1), Murphy_45 (E), Nibley_66 (J), Nivrat_78 (F1), NoSleep_45 (E), OrionPax_43 (E), Phatniss_83 (F1), Phrux_42 (E), Pinkcreek_11 (C1), Pringar_10 (S), Ptowny_43 (E), Pumpkin_45 (E), Rimmer_42 (E), RiverMonster_44 (E), SG4_79 (F1), ShereKhan_42 (E), Stark_45 (E), StormChicken_43 (E), TeamEdward_43 (E), TeardropMSU_40 (E), Thresher_46 (E), Tomaszewski_40 (E), Wachhund_79 (F1), Xandras_43 (E), Xiaokay_67 (J), Youngblood_43 (E), Zapner_89 (F2),

Start 55:

- Found in 5 of 162 (3.1%) of genes in pham
- Manual Annotations of this start: 3 of 143
- Called 100.0% of time when present

- Phage (with cluster) where this start called: Frickyeah_84 (DN1), Kuwabara_80 (DN4), ODay_87 (DN), TinyDot_39 (singleton), Toron_85 (F6),

Start 57:

- Found in 3 of 162 (1.9%) of genes in pham
- Manual Annotations of this start: 1 of 143
- Called 33.3% of time when present
- Phage (with cluster) where this start called: LunaBlu_89 (F1),

Start 59:

- Found in 32 of 162 (19.8%) of genes in pham
- Manual Annotations of this start: 3 of 143
- Called 9.4% of time when present
- Phage (with cluster) where this start called: Alatato_44 (FB), Birdsong_87 (DN), Lutum_94 (DN1),

Start 61:

- Found in 10 of 162 (6.2%) of genes in pham
- Manual Annotations of this start: 4 of 143
- Called 50.0% of time when present
- Phage (with cluster) where this start called: Asapag_87 (DN1), Kenna_88 (DN1), LitninMcQueen_99 (DN1), Phabuloso_101 (DN1), ShawBrad_98 (DN1),

Start 68:

- Found in 1 of 162 (0.6%) of genes in pham
- Manual Annotations of this start: 1 of 143
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Juniormint_57 (P1),

Start 70:

- Found in 2 of 162 (1.2%) of genes in pham
- Manual Annotations of this start: 2 of 143
- Called 100.0% of time when present
- Phage (with cluster) where this start called: BearBQ_59 (DN), Birdsong_61 (DN),

Start 71:

- Found in 3 of 162 (1.9%) of genes in pham
- Manual Annotations of this start: 2 of 143
- Called 66.7% of time when present
- Phage (with cluster) where this start called: Dante_84 (F1), Latretium_87 (F1),

Start 72:

- Found in 53 of 162 (32.7%) of genes in pham
- Manual Annotations of this start: 44 of 143
- Called 88.7% of time when present
- Phage (with cluster) where this start called: Ariel_72 (J), Atcoo_54 (P1), Avani_91 (F2), BAKA_81 (J), Beem_72 (J), Brusacoram_54 (P1), ByChance_74 (F1), CaptainTrips_82 (F1), Dallas_71 (J), DmpstrDiver_72 (J), Duke13_79 (J), Ejimix_72 (J), EleanorGeorge_87 (F1), Estave1_94 (F1), FairyPath_41 (E), GreaseLightnin_58 (P1), Halley_74 (J), HokkenD_65 (J), Hughesyang_71 (J), JuicyJay_71 (J), Kalah2_67 (J), Klein_72 (J), Latretium_83 (F1), Lucky2013_70 (J), Marleymoo_66 (J), Martik_82 (F1), Marvin_9 (S), MiaZeal_73 (J), Minerva_78 (J), MinionDave_78 (F1), NihilNomen_73 (J), Odette_71 (J), Phoebus_75 (J), Porcelain_72 (J),

Qualification_42 (E), Redno2_69 (J), Schatzie_67 (J), ShowerHandel_83 (F1), Squint_73 (J), StevieRay_57 (P1), Superphikiman_70 (J), Thespis_54 (P1), ThreeRngTarjay_70 (J), VRedHorse_87 (F1), Wanda_76 (J), Yoshi_97 (F2), Zelink_70 (J),

Start 87:

- Found in 1 of 162 (0.6%) of genes in pham
- No Manual Annotations of this start.
- Called 100.0% of time when present
- Phage (with cluster) where this start called: Stellammi_138 (UNK),

Summary by clusters:

There are 19 clusters represented in this pham: DN, F1, F2, P1, E, F6, F, FB, J, singleton, A1, DN4, S, DN1, B1, W, K1, UNK, C1,

Info for manual annotations of cluster A1:

- Start number 54 was manually annotated 8 times for cluster A1.

Info for manual annotations of cluster B1:

- Start number 50 was manually annotated 1 time for cluster B1.

Info for manual annotations of cluster C1:

- Start number 31 was manually annotated 1 time for cluster C1.
- Start number 54 was manually annotated 1 time for cluster C1.

Info for manual annotations of cluster DN:

- Start number 55 was manually annotated 1 time for cluster DN.
- Start number 59 was manually annotated 1 time for cluster DN.
- Start number 70 was manually annotated 2 times for cluster DN.

Info for manual annotations of cluster DN1:

- Start number 59 was manually annotated 1 time for cluster DN1.
- Start number 61 was manually annotated 4 times for cluster DN1.

Info for manual annotations of cluster DN4:

- Start number 55 was manually annotated 1 time for cluster DN4.

Info for manual annotations of cluster E:

- Start number 54 was manually annotated 34 times for cluster E.
- Start number 72 was manually annotated 1 time for cluster E.

Info for manual annotations of cluster F1:

- Start number 19 was manually annotated 4 times for cluster F1.
- Start number 54 was manually annotated 12 times for cluster F1.
- Start number 57 was manually annotated 1 time for cluster F1.
- Start number 71 was manually annotated 2 times for cluster F1.
- Start number 72 was manually annotated 9 times for cluster F1.

Info for manual annotations of cluster F2:

- Start number 51 was manually annotated 1 time for cluster F2.
- Start number 54 was manually annotated 3 times for cluster F2.

- Start number 72 was manually annotated 2 times for cluster F2.

Info for manual annotations of cluster FB:

- Start number 59 was manually annotated 1 time for cluster FB.

Info for manual annotations of cluster J:

- Start number 19 was manually annotated 2 times for cluster J.
- Start number 54 was manually annotated 1 time for cluster J.
- Start number 72 was manually annotated 26 times for cluster J.

Info for manual annotations of cluster K1:

- Start number 54 was manually annotated 3 times for cluster K1.

Info for manual annotations of cluster P1:

- Start number 68 was manually annotated 1 time for cluster P1.
- Start number 72 was manually annotated 5 times for cluster P1.

Info for manual annotations of cluster S:

- Start number 50 was manually annotated 1 time for cluster S.
- Start number 54 was manually annotated 9 times for cluster S.
- Start number 72 was manually annotated 1 time for cluster S.

Info for manual annotations of cluster W:

- Start number 51 was manually annotated 1 time for cluster W.

Gene Information:

Gene: 244_45 Start: 35533, Stop: 35168, Start Num: 54

Candidate Starts for 244_45:

(49, 35548), (Start: 54 @35533 has 71 MA's), (98, 35398), (106, 35374), (122, 35350), (128, 35305), (133, 35287),

Gene: Acme_63 Start: 41329, Stop: 40964, Start Num: 54

Candidate Starts for Acme_63:

(8, 41530), (28, 41386), (29, 41383), (Start: 54 @41329 has 71 MA's), (94, 41212), (98, 41194), (106, 41170), (122, 41146), (128, 41101),

Gene: Alatato_44 Start: 28004, Stop: 28411, Start Num: 59

Candidate Starts for Alatato_44:

(Start: 59 @28004 has 3 MA's), (Start: 61 @28013 has 4 MA's), (81, 28079), (84, 28085), (92, 28106), (96, 28121), (103, 28151), (106, 28160), (116, 28184), (126, 28238), (127, 28247), (128, 28250), (129, 28256), (158, 28376),

Gene: AmericanBeauty_43 Start: 35021, Stop: 34656, Start Num: 54

Candidate Starts for AmericanBeauty_43:

(36, 35060), (46, 35042), (Start: 54 @35021 has 71 MA's), (98, 34886), (106, 34862), (122, 34838), (128, 34793), (133, 34775),

Gene: Argie_65 Start: 48661, Stop: 49026, Start Num: 51

Candidate Starts for Argie_65:

(15, 48544), (21, 48574), (26, 48601), (41, 48637), (Start: 51 @48661 has 2 MA's), (88, 48766), (106, 48814), (115, 48832), (117, 48838), (126, 48895), (127, 48904), (145, 48976), (151, 49000), (155, 49015),

Gene: Ariel_72 Start: 46298, Stop: 45933, Start Num: 72

Candidate Starts for Ariel_72:

(Start: 72 @46298 has 44 MA's), (90, 46256), (118, 46160), (128, 46091), (140, 46052),

Gene: Asapag_87 Start: 50042, Stop: 50416, Start Num: 61

Candidate Starts for Asapag_87:

(23, 49937), (25, 49943), (37, 49976), (Start: 59 @50033 has 3 MA's), (Start: 61 @50042 has 4 MA's), (91, 50129), (138, 50294), (159, 50375), (160, 50378),

Gene: Atcoo_54 Start: 36879, Stop: 37241, Start Num: 72

Candidate Starts for Atcoo_54:

(10, 36651), (47, 36798), (53, 36822), (Start: 72 @36879 has 44 MA's), (102, 36954), (108, 36969), (118, 36996), (119, 37002), (125, 37047), (127, 37059), (164, 37218),

Gene: Aubs_83 Start: 50008, Stop: 50520, Start Num: 19

Candidate Starts for Aubs_83:

(Start: 19 @50008 has 6 MA's), (27, 50050), (93, 50212), (106, 50254), (130, 50356), (164, 50500),

Gene: Avani_88 Start: 46792, Stop: 47127, Start Num: 54

Candidate Starts for Avani_88:

(38, 46759), (Start: 54 @46792 has 71 MA's), (Start: 59 @46804 has 3 MA's), (Start: 72 @46852 has 44 MA's), (104, 46927), (113, 46936), (125, 46984), (127, 46996),

Gene: Avani_91 Start: 47610, Stop: 47966, Start Num: 72

Candidate Starts for Avani_91:

(Start: 72 @47610 has 44 MA's), (144, 47862),

Gene: BAKA_81 Start: 52347, Stop: 51940, Start Num: 72

Candidate Starts for BAKA_81:

(Start: 72 @52347 has 44 MA's), (90, 52305), (118, 52209), (120, 52188), (125, 52155), (127, 52143), (137, 52110), (163, 52002),

Gene: BearBQ_59 Start: 40143, Stop: 40532, Start Num: 70

Candidate Starts for BearBQ_59:

(6, 39858), (9, 39897), (12, 39936), (45, 40062), (Start: 70 @40143 has 2 MA's), (99, 40230), (126, 40329),

Gene: Beelzebub_13 Start: 3753, Stop: 4160, Start Num: 54

Candidate Starts for Beelzebub_13:

(Start: 54 @3753 has 71 MA's), (Start: 59 @3765 has 3 MA's), (98, 3891), (106, 3915), (122, 3939), (126, 3972), (164, 4137),

Gene: Beem_72 Start: 50575, Stop: 50210, Start Num: 72

Candidate Starts for Beem_72:

(Start: 72 @50575 has 44 MA's), (90, 50533), (118, 50437), (128, 50368), (140, 50329),

Gene: Big3_61 Start: 41706, Stop: 41350, Start Num: 54

Candidate Starts for Big3_61:

(33, 41754), (43, 41736), (Start: 54 @41706 has 71 MA's), (Start: 59 @41694 has 3 MA's), (98, 41568), (101, 41559), (106, 41544), (122, 41520), (125, 41490), (127, 41478),

Gene: Birdsong_87 Start: 49769, Stop: 50152, Start Num: 59

Candidate Starts for Birdsong_87:

(23, 49673), (25, 49679), (37, 49712), (Start: 59 @49769 has 3 MA's), (Start: 61 @49778 has 4 MA's), (91, 49865), (138, 50030), (159, 50111), (160, 50114),

Gene: Birdsong_61 Start: 38810, Stop: 39199, Start Num: 70

Candidate Starts for Birdsong_61:

(Start: 70 @38810 has 2 MA's), (99, 38897), (126, 38996),

Gene: Blarby_90 Start: 47520, Stop: 47888, Start Num: 54

Candidate Starts for Blarby_90:

(40, 47484), (Start: 54 @47520 has 71 MA's), (98, 47655), (106, 47679), (122, 47703), (128, 47748), (133, 47766), (148, 47814),

Gene: Bogg_42 Start: 34449, Stop: 34084, Start Num: 54

Candidate Starts for Bogg_42:

(36, 34488), (46, 34470), (Start: 54 @34449 has 71 MA's), (98, 34314), (106, 34290), (122, 34266), (128, 34221), (133, 34203),

Gene: BronnyJames_66 Start: 44654, Stop: 44142, Start Num: 19

Candidate Starts for BronnyJames_66:

(Start: 19 @44654 has 6 MA's), (27, 44612), (93, 44450), (106, 44408), (130, 44306), (164, 44162),

Gene: Brusacoram_54 Start: 36385, Stop: 36747, Start Num: 72

Candidate Starts for Brusacoram_54:

(10, 36157), (47, 36304), (53, 36328), (Start: 72 @36385 has 44 MA's), (102, 36460), (108, 36475), (118, 36502), (119, 36508), (125, 36553), (127, 36565), (164, 36724),

Gene: Buck_42 Start: 35321, Stop: 34953, Start Num: 54

Candidate Starts for Buck_42:

(Start: 54 @35321 has 71 MA's), (Start: 59 @35309 has 3 MA's), (98, 35183), (106, 35159), (122, 35135), (133, 35072),

Gene: Budgie_53 Start: 36596, Stop: 36261, Start Num: 48

Candidate Starts for Budgie_53:

(48, 36596), (67, 36542), (125, 36404), (127, 36392),

Gene: Bxb1_55 Start: 39572, Stop: 39207, Start Num: 54

Candidate Starts for Bxb1_55:

(8, 39773), (28, 39629), (29, 39626), (Start: 54 @39572 has 71 MA's), (94, 39455), (98, 39437), (106, 39413), (122, 39389), (128, 39344),

Gene: ByChance_74 Start: 45038, Stop: 45421, Start Num: 72

Candidate Starts for ByChance_74:

(Start: 72 @45038 has 44 MA's), (76, 45047), (107, 45149), (110, 45158), (125, 45230), (127, 45242), (157, 45368),

Gene: CaptainTrips_82 Start: 48768, Stop: 49100, Start Num: 72

Candidate Starts for CaptainTrips_82:

(Start: 72 @48768 has 44 MA's), (90, 48810), (118, 48906), (126, 48963),

Gene: Che8_85 Start: 49488, Stop: 49877, Start Num: 54

Candidate Starts for Che8_85:

(38, 49449), (Start: 54 @49488 has 71 MA's), (Start: 59 @49500 has 3 MA's), (82, 49572), (85, 49581), (98, 49617), (126, 49689),

Gene: Che9d_92 Start: 49021, Stop: 49440, Start Num: 51

Candidate Starts for Che9d_92:

(Start: 51 @49021 has 2 MA's), (88, 49126), (106, 49174), (115, 49192), (117, 49198), (127, 49264),

Gene: Cjw1_44 Start: 36482, Stop: 36078, Start Num: 54

Candidate Starts for Cjw1_44:

(Start: 54 @36482 has 71 MA's), (98, 36347), (106, 36323), (122, 36299), (128, 36254), (157, 36131),

Gene: Clarkson_11 Start: 3529, Stop: 3936, Start Num: 54

Candidate Starts for Clarkson_11:

(Start: 54 @3529 has 71 MA's), (Start: 59 @3541 has 3 MA's), (98, 3667), (106, 3691), (122, 3715), (126, 3748), (164, 3913),

Gene: Constella_63 Start: 45933, Stop: 45571, Start Num: 54

Candidate Starts for Constella_63:

(Start: 54 @45933 has 71 MA's), (Start: 72 @45873 has 44 MA's), (73, 45870), (86, 45837), (141, 45663),

Gene: Contagion_41 Start: 34707, Stop: 34342, Start Num: 54

Candidate Starts for Contagion_41:

(49, 34722), (Start: 54 @34707 has 71 MA's), (98, 34572), (106, 34548), (122, 34524), (133, 34461),

Gene: Cookies_41 Start: 35072, Stop: 34707, Start Num: 54

Candidate Starts for Cookies_41:

(49, 35087), (Start: 54 @35072 has 71 MA's), (98, 34937), (106, 34913), (122, 34889), (133, 34826),

Gene: Corazon_10 Start: 3482, Stop: 3889, Start Num: 54

Candidate Starts for Corazon_10:

(Start: 54 @3482 has 71 MA's), (Start: 59 @3494 has 3 MA's), (98, 3620), (106, 3644), (122, 3668), (126, 3701), (164, 3866),

Gene: Curiosium_93 Start: 56159, Stop: 56515, Start Num: 54

Candidate Starts for Curiosium_93:

(Start: 54 @56159 has 71 MA's), (Start: 59 @56171 has 3 MA's), (64, 56189), (95, 56258), (101, 56279), (112, 56300), (114, 56303), (121, 56324), (126, 56360), (131, 56381), (147, 56429), (149, 56432), (165, 56498),

Gene: Czyszczone1_44 Start: 35291, Stop: 34887, Start Num: 54

Candidate Starts for Czyszczone1_44:

(Start: 54 @35291 has 71 MA's), (98, 35156), (106, 35132), (122, 35108), (128, 35063), (157, 34940),

Gene: Dallas_71 Start: 49496, Stop: 49131, Start Num: 72

Candidate Starts for Dallas_71:

(Start: 72 @49496 has 44 MA's), (90, 49454), (118, 49358), (128, 49289), (140, 49250),

Gene: Dante_84 Start: 51687, Stop: 51980, Start Num: 71

Candidate Starts for Dante_84:

(Start: 57 @51639 has 1 MA's), (58, 51645), (Start: 71 @51687 has 2 MA's), (123, 51831), (131, 51864),

Gene: DmpstrDiver_72 Start: 49923, Stop: 49558, Start Num: 72

Candidate Starts for DmpstrDiver_72:

(Start: 72 @49923 has 44 MA's), (90, 49881), (118, 49785), (128, 49716), (140, 49677),

Gene: Donkeykong_89 Start: 51613, Stop: 52125, Start Num: 19

Candidate Starts for Donkeykong_89:

(Start: 19 @51613 has 6 MA's), (27, 51655), (93, 51817), (106, 51859), (130, 51961), (164, 52105),

Gene: DrDrey_44 Start: 36335, Stop: 35970, Start Num: 54

Candidate Starts for DrDrey_44:

(49, 36350), (Start: 54 @36335 has 71 MA's), (98, 36200), (106, 36176), (122, 36152), (128, 36107), (133, 36089),

Gene: Duke13_79 Start: 51559, Stop: 51152, Start Num: 72

Candidate Starts for Duke13_79:

(Start: 72 @51559 has 44 MA's), (90, 51517), (118, 51421), (120, 51400), (125, 51367), (127, 51355), (137, 51322), (163, 51214),

Gene: Efra2_92 Start: 56100, Stop: 56492, Start Num: 54

Candidate Starts for Efra2_92:

(Start: 54 @56100 has 71 MA's), (Start: 72 @56163 has 44 MA's), (80, 56184), (83, 56190), (100, 56247), (124, 56337), (125, 56340), (126, 56343), (131, 56364), (149, 56415), (164, 56475),

Gene: Ejimix_72 Start: 51361, Stop: 50996, Start Num: 72

Candidate Starts for Ejimix_72:

(Start: 72 @51361 has 44 MA's), (90, 51319), (118, 51223), (128, 51154), (140, 51115),

Gene: EleanorGeorge_87 Start: 51109, Stop: 51492, Start Num: 72

Candidate Starts for EleanorGeorge_87:

(63, 51076), (Start: 72 @51109 has 44 MA's), (107, 51220), (110, 51229), (125, 51301), (127, 51313), (157, 51439),

Gene: Elph10_43 Start: 34783, Stop: 34379, Start Num: 54

Candidate Starts for Elph10_43:

(Start: 54 @34783 has 71 MA's), (98, 34648), (106, 34624), (122, 34600), (128, 34555), (157, 34432),

Gene: Estave1_94 Start: 53968, Stop: 54324, Start Num: 72

Candidate Starts for Estave1_94:

(Start: 72 @53968 has 44 MA's), (144, 54220),

Gene: FairyPath_41 Start: 35211, Stop: 34846, Start Num: 72

Candidate Starts for FairyPath_41:

(Start: 72 @35211 has 44 MA's), (90, 35169), (118, 35073), (128, 35004), (140, 34965),

Gene: Fajezeel_62 Start: 40619, Stop: 40254, Start Num: 54

Candidate Starts for Fajezeel_62:

(8, 40820), (28, 40676), (29, 40673), (Start: 54 @40619 has 71 MA's), (94, 40502), (98, 40484), (106, 40460), (122, 40436), (128, 40391),

Gene: FeliMaine_11 Start: 3530, Stop: 3937, Start Num: 54

Candidate Starts for FeliMaine_11:

(Start: 54 @3530 has 71 MA's), (Start: 59 @3542 has 3 MA's), (98, 3668), (106, 3692), (122, 3716), (126, 3749), (164, 3914),

Gene: Filch_44 Start: 35012, Stop: 34647, Start Num: 54

Candidate Starts for Filch_44:

(Start: 54 @35012 has 71 MA's), (98, 34877), (106, 34853), (122, 34829), (133, 34766),

Gene: Flathead_79 Start: 48157, Stop: 48534, Start Num: 54

Candidate Starts for Flathead_79:

(52, 48154), (Start: 54 @48157 has 71 MA's), (67, 48199), (98, 48304), (106, 48328), (122, 48352), (133, 48415),

Gene: Frickyeah_84 Start: 46460, Stop: 46879, Start Num: 55

Candidate Starts for Frickyeah_84:

(Start: 55 @46460 has 3 MA's), (74, 46517), (96, 46580), (111, 46625), (139, 46748), (147, 46802), (152, 46811), (157, 46832), (162, 46841),

Gene: Fringe_55 Start: 47885, Stop: 47511, Start Num: 50

Candidate Starts for Fringe_55:

(Start: 50 @47885 has 2 MA's), (98, 47735), (106, 47711), (122, 47687), (126, 47654), (145, 47573),

Gene: Froghopper_59 Start: 39967, Stop: 39602, Start Num: 54

Candidate Starts for Froghopper_59:

(8, 40168), (28, 40024), (29, 40021), (Start: 54 @39967 has 71 MA's), (94, 39850), (98, 39832), (106, 39808), (122, 39784), (128, 39739),

Gene: Fruitloop_76 Start: 48252, Stop: 48602, Start Num: 54

Candidate Starts for Fruitloop_76:

(40, 48216), (Start: 54 @48252 has 71 MA's), (98, 48387), (106, 48411), (122, 48435), (126, 48468),

Gene: Galactic_79 Start: 48078, Stop: 48443, Start Num: 54

Candidate Starts for Galactic_79:

(1, 47778), (2, 47787), (3, 47793), (4, 47802), (5, 47832), (39, 48042), (Start: 54 @48078 has 71 MA's), (98, 48213), (106, 48237), (122, 48261), (128, 48306), (133, 48324),

Gene: GreaseLightnin_58 Start: 38269, Stop: 38631, Start Num: 72

Candidate Starts for GreaseLightnin_58:

(7, 38008), (11, 38041), (13, 38065), (14, 38071), (53, 38212), (Start: 72 @38269 has 44 MA's), (102, 38344), (108, 38359), (118, 38386), (119, 38392), (125, 38437), (127, 38449), (164, 38608),

Gene: Greg_62 Start: 40619, Stop: 40254, Start Num: 54

Candidate Starts for Greg_62:

(8, 40820), (28, 40676), (29, 40673), (Start: 54 @40619 has 71 MA's), (94, 40502), (98, 40484), (106, 40460), (122, 40436), (128, 40391),

Gene: Grimmer_91 Start: 49019, Stop: 49426, Start Num: 54

Candidate Starts for Grimmer_91:

(Start: 54 @49019 has 71 MA's), (Start: 59 @49031 has 3 MA's), (Start: 61 @49040 has 4 MA's), (98, 49157), (106, 49181), (122, 49205), (126, 49238), (142, 49310),

Gene: Guanica15_91 Start: 55792, Stop: 56184, Start Num: 54

Candidate Starts for Guanica15_91:

(Start: 54 @55792 has 71 MA's), (69, 55840), (Start: 72 @55855 has 44 MA's), (80, 55876), (83, 55882), (100, 55939), (124, 56029), (125, 56032), (126, 56035), (131, 56056), (149, 56107), (164, 56167),

Gene: Halley_74 Start: 50575, Stop: 50210, Start Num: 72

Candidate Starts for Halley_74:

(Start: 72 @50575 has 44 MA's), (90, 50533), (118, 50437), (128, 50368), (140, 50329),

Gene: HanKaySha_43 Start: 34995, Stop: 34630, Start Num: 54

Candidate Starts for HanKaySha_43:

(49, 35010), (Start: 54 @34995 has 71 MA's), (98, 34860), (106, 34836), (122, 34812), (128, 34767), (133, 34749),

Gene: Hannaconda_69 Start: 45759, Stop: 45247, Start Num: 19

Candidate Starts for Hannaconda_69:

(Start: 19 @45759 has 6 MA's), (27, 45717), (93, 45555), (106, 45513), (130, 45411), (164, 45267),

Gene: HokkenD_65 Start: 48844, Stop: 48479, Start Num: 72

Candidate Starts for HokkenD_65:

(Start: 72 @48844 has 44 MA's), (90, 48802), (118, 48706), (128, 48637), (140, 48598),

Gene: Hopey_44 Start: 35530, Stop: 35165, Start Num: 54

Candidate Starts for Hopey_44:

(49, 35545), (Start: 54 @35530 has 71 MA's), (98, 35395), (106, 35371), (122, 35347), (128, 35302), (133, 35284),

Gene: Hughesyang_71 Start: 50504, Stop: 50139, Start Num: 72

Candidate Starts for Hughesyang_71:

(Start: 72 @50504 has 44 MA's), (90, 50462), (118, 50366), (128, 50297), (140, 50258),

Gene: Huphlebuff_11 Start: 3259, Stop: 3666, Start Num: 54

Candidate Starts for Huphlebuff_11:

(Start: 54 @3259 has 71 MA's), (Start: 59 @3271 has 3 MA's), (98, 3397), (106, 3421), (122, 3445), (126, 3478), (164, 3643),

Gene: Jabbawokkie_90 Start: 47440, Stop: 47808, Start Num: 54

Candidate Starts for Jabbawokkie_90:

(40, 47404), (Start: 54 @47440 has 71 MA's), (98, 47575), (106, 47599), (122, 47623), (128, 47668), (133, 47686), (148, 47734),

Gene: JeTaime_44 Start: 36054, Stop: 35689, Start Num: 54

Candidate Starts for JeTaime_44:

(Start: 54 @36054 has 71 MA's), (98, 35919), (106, 35895), (122, 35871), (133, 35808),

Gene: JoieB_11 Start: 3478, Stop: 3885, Start Num: 54

Candidate Starts for JoieB_11:

(Start: 54 @3478 has 71 MA's), (Start: 59 @3490 has 3 MA's), (98, 3616), (106, 3640), (122, 3664), (126, 3697), (164, 3862),

Gene: JuicyJay_71 Start: 51709, Stop: 51344, Start Num: 72

Candidate Starts for JuicyJay_71:

(Start: 72 @51709 has 44 MA's), (90, 51667), (118, 51571), (128, 51502), (140, 51463),

Gene: Juniormint_57 Start: 37791, Stop: 38165, Start Num: 68

Candidate Starts for Juniormint_57:

(Start: 68 @37791 has 1 MA's), (102, 37878), (108, 37893), (118, 37920), (119, 37926), (125, 37971), (127, 37983), (164, 38142),

Gene: Kalah2_67 Start: 49868, Stop: 49503, Start Num: 72

Candidate Starts for Kalah2_67:

(Start: 72 @49868 has 44 MA's), (90, 49826), (118, 49730), (128, 49661), (140, 49622),

Gene: KashFlow_67 Start: 45630, Stop: 45118, Start Num: 19

Candidate Starts for KashFlow_67:

(Start: 19 @45630 has 6 MA's), (27, 45588), (89, 45438), (93, 45426), (106, 45384), (130, 45282), (164, 45138),

Gene: Kenna_88 Start: 49368, Stop: 49775, Start Num: 61

Candidate Starts for Kenna_88:

(23, 49263), (25, 49269), (37, 49302), (Start: 59 @49359 has 3 MA's), (Start: 61 @49368 has 4 MA's), (92, 49467), (96, 49482), (107, 49524), (109, 49530), (128, 49623), (153, 49719), (156, 49734),

Gene: Kenuha5_78 Start: 49646, Stop: 50158, Start Num: 19

Candidate Starts for Kenuha5_78:

(Start: 19 @49646 has 6 MA's), (93, 49850), (106, 49892), (130, 49994), (164, 50138),

Gene: Klein_72 Start: 49891, Stop: 49526, Start Num: 72

Candidate Starts for Klein_72:

(Start: 72 @49891 has 44 MA's), (90, 49849), (118, 49753), (128, 49684), (140, 49645),

Gene: Kumao_58 Start: 42552, Stop: 43010, Start Num: 20

Candidate Starts for Kumao_58:

(Start: 20 @42552 has 1 MA's), (22, 42555), (Start: 54 @42645 has 71 MA's), (98, 42780), (106, 42804), (122, 42828), (128, 42873), (133, 42891),

Gene: Kuwabara_80 Start: 47595, Stop: 48080, Start Num: 55

Candidate Starts for Kuwabara_80:

(Start: 55 @47595 has 3 MA's), (126, 47805), (154, 47946),

Gene: Latretium_80 Start: 47741, Stop: 48100, Start Num: 54

Candidate Starts for Latretium_80:

(Start: 54 @47741 has 71 MA's), (98, 47879), (101, 47888), (106, 47903), (122, 47927), (125, 47957), (127, 47969),

Gene: Latretium_87 Start: 49978, Stop: 50271, Start Num: 71

Candidate Starts for Latretium_87:

(Start: 57 @49930 has 1 MA's), (58, 49936), (Start: 71 @49978 has 2 MA's), (123, 50122), (131, 50155),

Gene: Latretium_83 Start: 48583, Stop: 48948, Start Num: 72

Candidate Starts for Latretium_83:

(Start: 72 @48583 has 44 MA's), (90, 48625), (118, 48721), (128, 48790), (140, 48829),

Gene: Lesedi_57 Start: 39252, Stop: 38887, Start Num: 54

Candidate Starts for Lesedi_57:

(8, 39453), (28, 39309), (29, 39306), (Start: 54 @39252 has 71 MA's), (94, 39135), (98, 39117), (106, 39093), (122, 39069), (128, 39024),

Gene: LilMoolah_80 Start: 49043, Stop: 49381, Start Num: 54

Candidate Starts for LilMoolah_80:

(38, 49004), (Start: 54 @49043 has 71 MA's), (Start: 59 @49055 has 3 MA's), (82, 49127), (85, 49136), (98, 49172), (126, 49244),

Gene: Lilac_46 Start: 35189, Stop: 34785, Start Num: 54

Candidate Starts for Lilac_46:

(Start: 54 @35189 has 71 MA's), (98, 35054), (106, 35030), (122, 35006), (128, 34961), (157, 34838),

Gene: Lilbit_11 Start: 3530, Stop: 3937, Start Num: 54

Candidate Starts for Lilbit_11:

(Start: 54 @3530 has 71 MA's), (Start: 59 @3542 has 3 MA's), (98, 3668), (106, 3692), (122, 3716), (126, 3749), (164, 3914),

Gene: Lilizi_43 Start: 34863, Stop: 34459, Start Num: 54

Candidate Starts for Lilizi_43:

(Start: 54 @34863 has 71 MA's), (98, 34728), (106, 34704), (122, 34680), (128, 34635), (157, 34512),

Gene: LitninMcQueen_99 Start: 52545, Stop: 52913, Start Num: 61

Candidate Starts for LitninMcQueen_99:

(23, 52440), (25, 52446), (37, 52479), (Start: 59 @52536 has 3 MA's), (Start: 61 @52545 has 4 MA's), (105, 52674), (127, 52746), (128, 52749), (159, 52872),

Gene: LittleLaf_10 Start: 3259, Stop: 3666, Start Num: 54

Candidate Starts for LittleLaf_10:

(Start: 54 @3259 has 71 MA's), (Start: 59 @3271 has 3 MA's), (98, 3397), (106, 3421), (122, 3445), (126, 3478), (164, 3643),

Gene: Lucky2013_70 Start: 46314, Stop: 45949, Start Num: 72

Candidate Starts for Lucky2013_70:

(Start: 72 @46314 has 44 MA's), (90, 46272), (118, 46176), (128, 46107), (140, 46068),

Gene: LunaBlu_89 Start: 51072, Stop: 51413, Start Num: 57

Candidate Starts for LunaBlu_89:

(Start: 57 @51072 has 1 MA's), (58, 51078), (Start: 71 @51120 has 2 MA's), (123, 51264), (131, 51297),

Gene: Lutum_94 Start: 50678, Stop: 51094, Start Num: 59

Candidate Starts for Lutum_94:

(23, 50582), (25, 50588), (37, 50621), (Start: 59 @50678 has 3 MA's), (Start: 61 @50687 has 4 MA's), (92, 50786), (96, 50801), (107, 50843), (109, 50849), (128, 50942), (153, 51038), (156, 51053),

Gene: MadamMonkfish_42 Start: 34547, Stop: 34182, Start Num: 54

Candidate Starts for MadamMonkfish_42:

(36, 34586), (46, 34568), (Start: 54 @34547 has 71 MA's), (98, 34412), (106, 34388), (122, 34364), (128, 34319), (133, 34301),

Gene: Mahavrat_77 Start: 46587, Stop: 46994, Start Num: 54

Candidate Starts for Mahavrat_77:

(Start: 54 @46587 has 71 MA's), (Start: 59 @46599 has 3 MA's), (Start: 61 @46608 has 4 MA's), (98, 46725), (106, 46749), (122, 46773), (126, 46806), (142, 46878),

Gene: Marker_83 Start: 48420, Stop: 48782, Start Num: 54

Candidate Starts for Marker_83:

(Start: 54 @48420 has 71 MA's), (Start: 72 @48480 has 44 MA's), (73, 48483), (86, 48516), (141, 48690),

Gene: Marleymoo_66 Start: 48687, Stop: 48322, Start Num: 72

Candidate Starts for Marleymoo_66:

(47, 48771), (Start: 72 @48687 has 44 MA's), (90, 48645), (118, 48549), (128, 48480), (140, 48441),

Gene: Martik_82 Start: 51049, Stop: 51432, Start Num: 72

Candidate Starts for Martik_82:

(44, 50959), (49, 50974), (63, 51016), (Start: 72 @51049 has 44 MA's), (107, 51160), (110, 51169), (125, 51241), (127, 51253), (157, 51379),

Gene: Marvin_9 Start: 3241, Stop: 3600, Start Num: 72

Candidate Starts for Marvin_9:

(Start: 72 @3241 has 44 MA's), (77, 3253), (102, 3316), (108, 3331), (118, 3358), (119, 3364), (125, 3409), (127, 3421),

Gene: Maxxinista_45 Start: 35159, Stop: 34755, Start Num: 54

Candidate Starts for Maxxinista_45:

(Start: 54 @35159 has 71 MA's), (98, 35024), (106, 35000), (122, 34976), (128, 34931), (157, 34808),

Gene: MiaZeal_73 Start: 46970, Stop: 46605, Start Num: 72

Candidate Starts for MiaZeal_73:

(Start: 72 @46970 has 44 MA's), (90, 46928), (118, 46832), (128, 46763), (140, 46724),

Gene: Minerva_78 Start: 51991, Stop: 51626, Start Num: 72

Candidate Starts for Minerva_78:

(Start: 72 @51991 has 44 MA's), (90, 51949), (118, 51853), (128, 51784), (140, 51745),

Gene: MinionDave_78 Start: 48768, Stop: 49100, Start Num: 72

Candidate Starts for MinionDave_78:

(Start: 72 @48768 has 44 MA's), (90, 48810), (118, 48906), (126, 48963),

Gene: Miniwave_41 Start: 35246, Stop: 34860, Start Num: 54

Candidate Starts for Miniwave_41:

(49, 35261), (Start: 54 @35246 has 71 MA's), (98, 35111), (106, 35087), (122, 35063), (128, 35018), (140, 34979),

Gene: Moldemort_42 Start: 34776, Stop: 34411, Start Num: 54

Candidate Starts for Moldemort_42:

(36, 34815), (46, 34797), (Start: 54 @34776 has 71 MA's), (98, 34641), (106, 34617), (122, 34593), (128, 34548), (133, 34530),

Gene: Mosby_40 Start: 34707, Stop: 34342, Start Num: 54

Candidate Starts for Mosby_40:

(49, 34722), (Start: 54 @34707 has 71 MA's), (98, 34572), (106, 34548), (122, 34524), (133, 34461),

Gene: MrGordo_62 Start: 40946, Stop: 40590, Start Num: 54

Candidate Starts for MrGordo_62:

(Start: 54 @40946 has 71 MA's), (Start: 59 @40934 has 3 MA's), (98, 40808), (101, 40799), (106, 40784), (122, 40760), (125, 40730), (127, 40718),

Gene: Murphy_45 Start: 35671, Stop: 35267, Start Num: 54

Candidate Starts for Murphy_45:

(Start: 54 @35671 has 71 MA's), (98, 35536), (106, 35512), (122, 35488), (128, 35443), (157, 35320),

Gene: Nekros_71 Start: 48970, Stop: 48458, Start Num: 19

Candidate Starts for Nekros_71:

(Start: 19 @48970 has 6 MA's), (93, 48766), (106, 48724), (130, 48622), (164, 48478),

Gene: Nibley_66 Start: 45326, Stop: 44961, Start Num: 54

Candidate Starts for Nibley_66:

(Start: 31 @45374 has 1 MA's), (35, 45368), (Start: 54 @45326 has 71 MA's), (98, 45191), (106, 45167), (122, 45143), (133, 45080),

Gene: NihilNomen_73 Start: 50662, Stop: 50297, Start Num: 72

Candidate Starts for NihilNomen_73:

(Start: 72 @50662 has 44 MA's), (90, 50620), (118, 50524), (128, 50455), (140, 50416),

Gene: Nivrat_78 Start: 48916, Stop: 49254, Start Num: 54

Candidate Starts for Nivrat_78:

(38, 48877), (Start: 54 @48916 has 71 MA's), (Start: 59 @48928 has 3 MA's), (82, 49000), (85, 49009), (98, 49045), (126, 49117),

Gene: NoSleep_45 Start: 35431, Stop: 35027, Start Num: 54

Candidate Starts for NoSleep_45:

(Start: 54 @35431 has 71 MA's), (98, 35296), (106, 35272), (122, 35248), (128, 35203), (157, 35080),

Gene: ODay_87 Start: 48574, Stop: 49005, Start Num: 55

Candidate Starts for ODay_87:

(Start: 55 @48574 has 3 MA's), (74, 48631), (96, 48694), (111, 48739), (126, 48802), (152, 48937),

Gene: Odette_71 Start: 49705, Stop: 49340, Start Num: 72

Candidate Starts for Odette_71:

(Start: 72 @49705 has 44 MA's), (90, 49663), (118, 49567), (128, 49498), (140, 49459),

Gene: OrionPax_43 Start: 35001, Stop: 34636, Start Num: 54

Candidate Starts for OrionPax_43:

(Start: 54 @35001 has 71 MA's), (98, 34866), (106, 34842), (122, 34818), (133, 34755),

Gene: Phabuloso_101 Start: 52179, Stop: 52547, Start Num: 61

Candidate Starts for Phabuloso_101:

(23, 52074), (25, 52080), (37, 52113), (Start: 59 @52170 has 3 MA's), (Start: 61 @52179 has 4 MA's), (105, 52308), (128, 52383), (159, 52506),

Gene: Phatniss_83 Start: 49365, Stop: 49781, Start Num: 54

Candidate Starts for Phatniss_83:

(Start: 54 @49365 has 71 MA's), (82, 49449), (85, 49458), (98, 49494), (125, 49563), (127, 49575), (135, 49608), (150, 49707),

Gene: Phoebus_75 Start: 51844, Stop: 51479, Start Num: 72

Candidate Starts for Phoebus_75:

(Start: 72 @51844 has 44 MA's), (90, 51802), (118, 51706), (128, 51637), (140, 51598),

Gene: Phrux_42 Start: 34994, Stop: 34629, Start Num: 54

Candidate Starts for Phrux_42:

(49, 35009), (Start: 54 @34994 has 71 MA's), (98, 34859), (106, 34835), (122, 34811), (128, 34766), (133, 34748),

Gene: Pinkcreek_11 Start: 4628, Stop: 5008, Start Num: 54

Candidate Starts for Pinkcreek_11:

(40, 4592), (Start: 54 @4628 has 71 MA's), (98, 4763), (106, 4787), (122, 4811), (126, 4844), (146, 4904), (147, 4907), (161, 4937),

Gene: Porcelain_72 Start: 46970, Stop: 46605, Start Num: 72

Candidate Starts for Porcelain_72:

(Start: 72 @46970 has 44 MA's), (90, 46928), (118, 46832), (128, 46763), (140, 46724),

Gene: Pringar_10 Start: 3084, Stop: 3491, Start Num: 54

Candidate Starts for Pringar_10:

(Start: 54 @3084 has 71 MA's), (Start: 59 @3096 has 3 MA's), (98, 3222), (106, 3246), (122, 3270), (126, 3303), (164, 3468),

Gene: Ptowny_43 Start: 34586, Stop: 34221, Start Num: 54

Candidate Starts for Ptowny_43:

(49, 34601), (Start: 54 @34586 has 71 MA's), (94, 34469), (98, 34451), (106, 34427), (122, 34403), (128, 34358), (133, 34340),

Gene: Pumpkin_45 Start: 35920, Stop: 35555, Start Num: 54

Candidate Starts for Pumpkin_45:

(Start: 54 @35920 has 71 MA's), (98, 35785), (106, 35761), (122, 35737), (133, 35674),

Gene: Qualification_42 Start: 35222, Stop: 34857, Start Num: 72

Candidate Starts for Qualification_42:

(Start: 72 @35222 has 44 MA's), (90, 35180), (118, 35084), (128, 35015), (140, 34976),

Gene: Rabinovish_16 Start: 6579, Stop: 6902, Start Num: 31

Candidate Starts for Rabinovish_16:

(Start: 31 @6579 has 1 MA's), (35, 6585), (Start: 54 @6627 has 71 MA's), (98, 6762), (106, 6786), (122, 6810), (128, 6855), (136, 6882),

Gene: RedRaider77_11 Start: 3531, Stop: 3950, Start Num: 50

Candidate Starts for RedRaider77_11:

(Start: 50 @3531 has 2 MA's), (98, 3681), (106, 3705), (122, 3729), (124, 3756), (125, 3759),

Gene: Redno2_69 Start: 47458, Stop: 47093, Start Num: 72

Candidate Starts for Redno2_69:

(Start: 72 @47458 has 44 MA's), (90, 47416), (118, 47320), (128, 47251), (140, 47212),

Gene: Rimmer_42 Start: 34931, Stop: 34563, Start Num: 54

Candidate Starts for Rimmer_42:

(Start: 54 @34931 has 71 MA's), (Start: 59 @34919 has 3 MA's), (98, 34793), (106, 34769), (122, 34745), (133, 34682),

Gene: RiverMonster_44 Start: 35447, Stop: 35043, Start Num: 54
Candidate Starts for RiverMonster_44:
(Start: 54 @35447 has 71 MA's), (98, 35312), (106, 35288), (122, 35264), (128, 35219), (157, 35096),

Gene: SG4_79 Start: 48739, Stop: 49107, Start Num: 54
Candidate Starts for SG4_79:
(42, 48706), (Start: 54 @48739 has 71 MA's), (98, 48877), (101, 48886), (106, 48901), (122, 48925),
(133, 48988),

Gene: Schatzie_67 Start: 49452, Stop: 49087, Start Num: 72
Candidate Starts for Schatzie_67:
(Start: 72 @49452 has 44 MA's), (90, 49410), (118, 49314), (128, 49245), (140, 49206),

Gene: Shaboozey_65 Start: 44675, Stop: 44163, Start Num: 19
Candidate Starts for Shaboozey_65:
(Start: 19 @44675 has 6 MA's), (27, 44633), (93, 44471), (106, 44429), (130, 44327), (164, 44183),

Gene: ShawBrad_98 Start: 50296, Stop: 50670, Start Num: 61
Candidate Starts for ShawBrad_98:
(23, 50191), (25, 50197), (37, 50230), (Start: 59 @50287 has 3 MA's), (Start: 61 @50296 has 4 MA's),
(91, 50383), (138, 50548), (159, 50629), (160, 50632),

Gene: ShereKhan_42 Start: 35964, Stop: 35599, Start Num: 54
Candidate Starts for ShereKhan_42:
(49, 35979), (Start: 54 @35964 has 71 MA's), (98, 35829), (106, 35805), (122, 35781), (128, 35736),
(133, 35718),

Gene: ShowerHandel_83 Start: 48976, Stop: 49359, Start Num: 72
Candidate Starts for ShowerHandel_83:
(Start: 72 @48976 has 44 MA's), (76, 48985), (107, 49087), (110, 49096), (125, 49168), (127, 49180),
(157, 49306),

Gene: Squint_73 Start: 47089, Stop: 46724, Start Num: 72
Candidate Starts for Squint_73:
(Start: 72 @47089 has 44 MA's), (90, 47047), (118, 46951), (128, 46882), (140, 46843),

Gene: Stark_45 Start: 35450, Stop: 35046, Start Num: 54
Candidate Starts for Stark_45:
(49, 35465), (Start: 54 @35450 has 71 MA's), (98, 35315), (106, 35291), (122, 35267), (128, 35222),
(157, 35099),

Gene: Stellammi_138 Start: 61513, Stop: 61869, Start Num: 87
Candidate Starts for Stellammi_138:
(32, 61351), (65, 61444), (66, 61447), (87, 61513), (90, 61522), (97, 61555), (131, 61687), (134,
61702), (139, 61723), (150, 61798), (158, 61822), (164, 61852),

Gene: StevieRay_57 Start: 37992, Stop: 38351, Start Num: 72
Candidate Starts for StevieRay_57:
(7, 37731), (11, 37764), (13, 37788), (14, 37794), (53, 37935), (Start: 72 @37992 has 44 MA's), (102,
38067), (108, 38082), (118, 38109), (119, 38115), (125, 38160), (127, 38172), (164, 38328),

Gene: StormChicken_43 Start: 35539, Stop: 35171, Start Num: 54
Candidate Starts for StormChicken_43:

(Start: 54 @35539 has 71 MA's), (Start: 59 @35527 has 3 MA's), (98, 35401), (106, 35377), (122, 35353), (133, 35290),

Gene: SuperGrey_83 Start: 51298, Stop: 51810, Start Num: 19

Candidate Starts for SuperGrey_83:

(Start: 19 @51298 has 6 MA's), (27, 51340), (93, 51502), (106, 51544), (130, 51646), (164, 51790),

Gene: Superphikiman_70 Start: 46180, Stop: 45815, Start Num: 72

Candidate Starts for Superphikiman_70:

(Start: 72 @46180 has 44 MA's), (90, 46138), (118, 46042), (128, 45973), (140, 45934),

Gene: TeamEdward_43 Start: 35536, Stop: 35168, Start Num: 54

Candidate Starts for TeamEdward_43:

(Start: 54 @35536 has 71 MA's), (Start: 59 @35524 has 3 MA's), (98, 35398), (106, 35374), (122, 35350), (133, 35287),

Gene: TeardropMSU_40 Start: 34933, Stop: 34568, Start Num: 54

Candidate Starts for TeardropMSU_40:

(49, 34948), (Start: 54 @34933 has 71 MA's), (98, 34798), (106, 34774), (122, 34750), (133, 34687),

Gene: Thespis_54 Start: 36385, Stop: 36747, Start Num: 72

Candidate Starts for Thespis_54:

(10, 36157), (47, 36304), (53, 36328), (Start: 72 @36385 has 44 MA's), (102, 36460), (108, 36475), (118, 36502), (119, 36508), (125, 36553), (127, 36565), (164, 36724),

Gene: ThreeRngTarjay_70 Start: 50738, Stop: 50373, Start Num: 72

Candidate Starts for ThreeRngTarjay_70:

(Start: 72 @50738 has 44 MA's), (90, 50696), (118, 50600), (128, 50531), (140, 50492),

Gene: Thresher_46 Start: 36685, Stop: 36281, Start Num: 54

Candidate Starts for Thresher_46:

(Start: 54 @36685 has 71 MA's), (98, 36550), (106, 36526), (122, 36502), (126, 36469), (157, 36334),

Gene: TinyDot_39 Start: 28787, Stop: 29068, Start Num: 55

Candidate Starts for TinyDot_39:

(16, 28661), (17, 28664), (18, 28673), (Start: 55 @28787 has 3 MA's), (126, 29000),

Gene: Tomaszewski_40 Start: 34800, Stop: 34435, Start Num: 54

Candidate Starts for Tomaszewski_40:

(49, 34815), (Start: 54 @34800 has 71 MA's), (98, 34665), (106, 34641), (122, 34617), (133, 34554),

Gene: Toron_85 Start: 51169, Stop: 51453, Start Num: 55

Candidate Starts for Toron_85:

(Start: 50 @51154 has 2 MA's), (Start: 55 @51169 has 3 MA's), (75, 51232), (78, 51241), (126, 51409), (131, 51430), (132, 51439),

Gene: VRedHorse_87 Start: 48107, Stop: 48463, Start Num: 72

Candidate Starts for VRedHorse_87:

(Start: 72 @48107 has 44 MA's), (144, 48359),

Gene: Wachhund_79 Start: 46376, Stop: 46765, Start Num: 54

Candidate Starts for Wachhund_79:

(33, 46334), (34, 46337), (Start: 54 @46376 has 71 MA's), (Start: 59 @46388 has 3 MA's), (79, 46454), (100, 46517), (107, 46541), (125, 46625), (127, 46637),

Gene: Wanda_76 Start: 50200, Stop: 49835, Start Num: 72

Candidate Starts for Wanda_76:

(Start: 72 @50200 has 44 MA's), (90, 50158), (118, 50062), (128, 49993), (140, 49954),

Gene: Xandras_43 Start: 35049, Stop: 34684, Start Num: 54

Candidate Starts for Xandras_43:

(Start: 54 @35049 has 71 MA's), (98, 34914), (106, 34890), (122, 34866), (133, 34803),

Gene: Xiaokay_67 Start: 47794, Stop: 47432, Start Num: 54

Candidate Starts for Xiaokay_67:

(Start: 54 @47794 has 71 MA's), (Start: 72 @47734 has 44 MA's), (73, 47731), (86, 47698), (141, 47524),

Gene: Yoshi_97 Start: 50855, Stop: 51199, Start Num: 72

Candidate Starts for Yoshi_97:

(24, 50720), (30, 50744), (56, 50801), (60, 50813), (62, 50822), (Start: 72 @50855 has 44 MA's), (143, 51101),

Gene: Youngblood_43 Start: 35542, Stop: 35174, Start Num: 54

Candidate Starts for Youngblood_43:

(Start: 54 @35542 has 71 MA's), (Start: 59 @35530 has 3 MA's), (98, 35404), (106, 35380), (122, 35356), (133, 35293),

Gene: Zapner_89 Start: 47534, Stop: 47902, Start Num: 54

Candidate Starts for Zapner_89:

(40, 47498), (Start: 54 @47534 has 71 MA's), (98, 47669), (106, 47693), (122, 47717), (128, 47762), (133, 47780), (148, 47828),

Gene: Zelink_70 Start: 51051, Stop: 50686, Start Num: 72

Candidate Starts for Zelink_70:

(Start: 72 @51051 has 44 MA's), (90, 51009), (118, 50913), (128, 50844), (140, 50805),